

DEER HERD UNIT MANAGEMENT PLAN
Deer Herd Unit # 9
(South Slope)
April 2006

BOUNDARY DESCRIPTION

Wasatch, Summit, Daggett, Uintah, Duchesne counties - Boundary begins at the Junction of US-40 and SR-87 in Duchesne; north on SR-87 to SR-35; northwest on SR-35 to the Provo River; north along the Provo River to the North Fork Provo River; north along the North Fork Provo River to SR-150; north along SR-150 to the Summit/Duchesne county line (summit of the Uinta Mountains); east along the summit of the Uinta Mountains to US-191; north along US-191 to Cart Creek; north along Cart Creek to Flaming Gorge Reservoir; east along Flaming Gorge Reservoir to the Green River; east along the Green River to the Utah-Colorado state line; south along the Utah-Colorado state line to the White River; west along the White River to the Green River; north along the Green River to the Duchesne River; west along the Duchesne River to US-40 at Myton; west along US-40 to SR-87 in Duchesne.

LAND OWNERSHIP

RANGE AREA AND APPROXIMATE OWNERSHIP

	Yearlong range		Summer Range		Winter Range	
Ownership	Area (acres)	%	Area (acres)	%	Area (acres)	%
Forest Service	0	0%	601817	53%	38165	5%
Bureau of Land Management	388251	41%	97496	9%	223035	31%
Utah State Institutional Trust Lands	67305	7%	12320	1%	45610	6%
Native American Trust Lands	133415	14%	35293	3%	206941	28%
Private	344309	36%	108198	9%	177247	24%
Department of Defense	0	0%	0	0%	0	0%
USFWS Refuge	8703	1%	0	0%	272	0%
National Parks	7435	1%	8009	1%	35185	5%
Utah State Parks	62	0%	0	0%	946	0%
Utah Division of Wildlife Resources	1201	0%	10603	1%	2197	0%
National recreation Areas	0	0%	1559	1%	2352	0%
USFS & BLM Wilderness Areas	0	0%	264713	23%	0	0%
TOTAL	950681	100%	1140008	100%	731950	100%

UNIT MANAGEMENT GOALS

- Manage for a population of healthy animals capable of providing a broad range of recreational opportunities, including hunting and viewing.
- Balance deer herd impacts on human needs, such as private property rights, agricultural crops and local economies.
- Maintain the population at a level that is within the short-term capability or “carrying capacity” of the available habitat, based on winter range trend studies conducted every five years. Using the long-term population objective as a guide, the short-term objective will be adjusted according to the percent change of the most recent range trend assessments of the Desired Components Index (DCI). [The DCI is a measurement of the condition of the big game winter range and relates to the potential “carrying capacity” of big game on that range. As the DCI changes, the short-term population objective may increase or decrease].

POPULATION MANAGEMENT OBJECTIVES

- < **Long Term Target Winter Herd Size** – A winter population of 26,000 deer distributed in the following subpopulations:

- 9a Yellowstone subpopulation: (New Objective) 13,000
- 9b,c&d Vernal/Bonanza and Diamond Mountain subpopulations: 13,000

If forage production or range conditions are identified as a problem antlerless deer permits will be used to address specific locations of concern.

	Unit 9 Total	Subunit 9A	Subunit 9BCD
2001 Objective	25,000	12,000	13,000
2006 Objective	26,000	13,000	13,000
Change	+1,000	+1,000	0

- The subunit 9a population objective was increased in 2006 to reflect additional deer carrying capacity on this unit, reflected by strong DWR permanent range trend readings in 2005 (see Habitat Objectives below). These population objectives remain for both the short-term (5-year life of this plan) and long term, barring significant changes in range conditions.
- < **Herd Composition** – The General Season portion of this unit (Yellowstone, Vernal and Bonanza subunits, 9BCD) is managed to attain a region-wide 3-year average postseason buck to doe ratio objective of 15-20 bucks per 100 does. The Diamond Mountain subpopulation is managed under a limited entry hunting strategy. The herd composition on this subunit will be managed toward three-year average postseason ratios ranging from 25 to 35 bucks:100 does.
- < **Harvest** - The Yellowstone, Vernal and Bonanza subpopulations will be managed under general season hunting regulations, within the Northeastern Region hunter cap. The South Slope Diamond Mountain subunit will be managed with limited entry hunting regulations.

POPULATION MANAGEMENT STRATEGIES

Monitoring

- < Population Size - Utilizing harvest data, postseason and spring classifications and mortality estimates, a computer model has been developed to estimate winter population size.
- < Buck Age Structure - Monitor age class structure of the buck population through the use of checking stations, postseason classification, tooth cementum annuli analysis, uniform harvest surveys and field bag checks.
- < Harvest - The primary means of monitoring harvest will be through the statewide uniform harvest survey and the use of checking stations. Achieve the target population size by use of antlerless harvest using a variety of harvest methods and seasons. The winter population should result in an expected annual harvest of 1,500 bucks on subunit 9a, 1,100 bucks on subunits 9b and 9d and 200 bucks on subunit 9c (Diamond Mountain) when normal conditions occur. Recognize that buck harvest will be above or below what is expected due to climatic and productivity variables. Buck harvest strategies will be developed through the RAC and Wildlife Board process to achieve management objectives for buck: doe ratios.

Limiting Factors (May prevent achieving management objectives)

- < Crop Depredation - Take all steps necessary to minimize depredation as prescribed by state law and DWR policy.
- < Habitat - Public land winter range availability, landowner acceptance and winter range forage conditions will determine herd size. Excessive habitat utilization will be addressed.
- < Predation - Refer to DWR predator management policy.
 - Assess need for control of predators by species, geographic area and season of year.
 - Seek assistance from Wildlife Services when deer populations are depressed and where there is a reasonable chance of gaining some relief through a predator control effort. Concentrate Wildlife Services control efforts during and immediately prior to the fawning period.
 - Recommend cougar harvest to benefit deer while maintaining the cougar as a valued resource in its own right.
- < Highway Mortality - Cooperate with the Utah Department of Transportation in construction of highway fences, passage structures and warning signs etc.
- < Illegal Harvest - Should illegal kill become an identified and significant source of mortality, attempt to develop specific preventive measures within the context of an action plan developed in cooperation with the Law Enforcement Section.

HABITAT MANAGEMENT OBJECTIVES

- < Maintain and/or enhance forage production through direct range improvements throughout the unit on winter range to achieve population management objectives.
- < Work with private landowners and federal, state, local agencies, and the Ute Tribe to maintain and protect critical and existing winter range from future losses.
- < Provide improved habitat security and escapement opportunities for deer.

HABITAT MANAGEMENT STRATEGIES

- < Continue to monitor permanent range trend studies located throughout the unit.
- < Conduct cooperative seasonal range rides and surveys to evaluate forage condition and utilization.
- < Work cooperatively to utilize grazing, prescribed burning, mechanical and other recognized vegetative manipulation techniques to enhance deer forage quantity and quality.
- < Utilize antlerless deer harvest to improve or protect forage conditions if and when vegetative declines are attributed to deer over utilization or are expected due to severe weather conditions.
- < Cooperate with and provide input to land management planning efforts dealing with actions affecting habitat security, quality and quantity.

PERMANENT RANGE TREND SUMMARIES

The following table summarizes the condition of deer winter range on Unit 9, as indicated by DWR range trend surveys:

Year	Mean DCI Score for Unit	Classification	Unit-specific DCI Score Range: Poor	Unit-specific DCI Score Range: Fair	Unit-specific DCI Score Range: Good
1995	62	Good	27-41	42-58	59-76
2000	58	Fair			
2005	56	Fair			

The South Slope deer unit is currently considered to be in fair condition based upon the last range trend studies conducted in 2005. The unit wide DCI average is 56, however, this ranking has been decreasing. In 2000 it was 58, and in 1995 it was 62. Some of the low potential sites are in very poor condition and are reflective of the sagebrush die-off that occurred in 2003. These low potential sites are located on the most critical winter range in subunit 9bcd. Conversely, subunit 9a has good range conditions, and this subunit is considered capable of supporting additional deer; therefore, the population objective on subunit 9a was increased by 1,000 deer.

Unit 9bcd, South Slope, Vernal, Diamond Mountain and Bonanza Subunits

A total of 12 study sites were read on this unit in 2005. Range trend varies depending upon the sites ecological potential, but the average 2005 DCI value for these subunits was 42. This falls at the bottom of the Fair DCI classification (42-58). Areas in critical deer winter range with low ecological potential are of great concern, while upper / transition winter range is in good shape.

Seven of these study sites are located at sites with a low ecological potential. The average DCI value for these sites is 25, which is in the Very Poor DCI classification. Fifty seven percent of these are considered poor to very poor with decreasing DCI values. These sites are located at Taylor Mountain, Island Park, Steinacker Draw and Brush Creek Flat. These are representative of areas, which experienced a sagebrush die-off in 2003 after a prolonged drought.

Five study sites are located at sites with a mid to high range ecological potential. Eighty percent of these are considered to be in fair to good condition. Deer uses these sites during transition to critical winter range and during light winters with below normal snow depths. These areas did not experience browse die-offs during the drought.

Unit 9a, South Slope, Yellowstone Subunit

Eight range trend sites were assessed in 2005 across the Yellowstone subunit. The average 2005 DCI value for these subunits was 76. This ranks at the top of the Good DCI classification (59-76) for the subunit. Most of the studies on this subunit are located in the mountain brush and mountain sagebrush habitat type and sample deer winter range. Some sites sample higher elevation winter range, which is likely used in the spring and summer as well. There are currently no low elevation monitoring sites on this subunit to represent the most critical winter range.

Three of the four Mid Potential trend sites (7,000'-7,900') are rated in good condition with the fourth in fair condition. They are down slightly from 2000. Three of the four High Potential sites (7,000'-8160') are rated in good condition with the fourth rated in excellent condition. These mid elevation sites all appear to have survived the drought and are in reasonably good condition. There is a need more additional monitoring sites at lower elevation wintering areas which become crucial in hard winters. For example: the Clay Basin area near Bluebell (6300') suffered high sagebrush mortality due to the drought. The area has historically wintered large numbers of deer but will take years to recover. Additional monitoring is needed in those types of areas.

Duration of Plan

This unit management plan was approved by the Wildlife Board on _____ and will be in effect for five years from that date, or until amended.

APPENDIX**Unit 9a South Slope, Yellowstone Subunit**

Wasatch, Summit, Duchesne, Uintah counties -- Boundary begins at the Junction of US-40 and SR-87 in Duchesne; then north on SR-87 to SR-35; then northwest on SR-35 to the Provo River; north along the Provo River to the North Fork Provo River; north along the North Fork Provo River to Highway SR-150; north along SR-150 to the Summit/Duchesne county line (summit of the Uinta Mountains); east along the summit of the Uinta Mountains to the Dry Fork-White Rocks drainage divide; south along this drainage divide to Paradise Park Reservoir and Forest Service road 104; south along this road to Deep Creek; south along this creek to the Uinta River; south along this river to the Duchesne River; west along the Duchesne River to US-40 at Myton; west along US-40 to SR-87 in Duchesne.

Unit 9b South Slope, Vernal Subunit

Uintah, Daggett counties -- Boundary begins at the Dry Fork-White Rocks drainage divide and the Daggett-Uintah county line (summit of the Uinta mountains); east along the summit of the Uinta mountains to US-191; north along US-191 to Cart Creek; north along Cart Creek to Flaming Gorge Reservoir; east along Flaming Gorge Reservoir to the Green River; east along the Green River to Gorge Creek; south along Gorge Creek to the summit and the head of Davenport Draw; south along the Forest Service-Private Land boundary on the west side of Davenport Draw and continuing south along this Forest Service boundary to the BLM boundary on the Diamond Mountain rim; east and south along the Diamond Mountain rim to the Diamond Mountain road; south and west along this road to the Brush Creek road; south along this road to the Island Park/Rainbow Park road; east along this road to the Dinosaur National Monument boundary; north and east along this boundary to the Utah-Colorado state line; south along this state line to the Green River; south along this river to the Duchesne River; west along this river to the Uinta River; north along this river to Deep Creek; north along this creek to Forest Service road 104 (Paradise Park Reservoir road); north along this road to Paradise Park Reservoir and the Dry Fork-Whiterocks drainage divide; north along this drainage divide to the Daggett-Uintah county line (summit of the Uinta mountains).

Unit 9c South Slope, Diamond Mountain Subunit

Uintah, Daggett counties -- Boundary begins at the Green River and the Utah-Colorado state line; then west along this river to Gorge Creek; then south along Gorge Creek to the summit and the head of Davenport Draw; south along the Forest Service-Private Land boundary on the west side of Davenport Draw and continuing south along this Forest Service boundary to the BLM Boundary on the Diamond Mountain Rim; east and south along the Diamond Mountain rim to the Diamond Mountain road; south and west along this road to the Brush Creek road; south along this road to the Island Park / Rainbow Park road; east along this road to the Dinosaur National Monument Boundary; north and east along this boundary to the Utah -Colorado state line; north along this state line to the Green River.

Unit 9d South Slope, Bonanza Subunit

Uintah county -- Boundary begins at the Colorado-Utah state line and the White River; west along this river to the Green River; north along this river to the Colorado-Utah state line; south along this state line to the White River.